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The Adequate Family Farm--Mainstay of the Farm Economy

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The Adequate Family Farm--Mainstay of the Farm Economy

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TWO CHANGES in the organization of the farm economy are basic in U.S. agriculture since World War II. One is the rapid decline in the number of farms. The other is the increasing volume of production from the remaining farms.

These changes have been the source of much confusion. They have been often misunderstood, and many times misrepresented. They have been interpreted as indicating a concentration of farm production into an ever smaller number of large farming organizations, and also as heralding the doom of the family farm[1] in American agriculture. Such interpretations, however, are mistaken. They suffer from the error of failing to take into account differences in the economic importance of these changing farms. It is somewhat similar to counting money by number of units without taking into consideration the different value of each unit.[2]

Three observations demonstrate the error of identifying the postwar changes in number, production, and size of farms with the concentration of farm production in large nonfamily businesses: First, the very small units account for most of the net decrease in number of farms. Second, farm production, land, and other resources are concentrating not in a smaller number of large farming organizations, but in a rapidly expanding number of adequate farms. Finally, the number of farms and farm production are increasing more rapidly among adequate family farms[3] than among the larger-than-family farms.

Decrease in Small Units

There were 1.2 million fewer farms in 1959 than in 1949. It is estimated that the number decreased by an additional 600,000 units from 1959 to 1964. But this decrease did not occur in all sizes of farms. From 1949 to 1959, the net decline in number of farms was entirely accounted for by a decrease in the number of small units with less than $2,500 of sales (1959 prices) representing the main livelihood and the main occupation for their operators.[4] The number of farms with $2,500 to $9,999 of sales decreased also, but at a much slower rate. Their decline was almost entirely compensated by the increase in the number of farms with $10,000 or more of sales. Thus, the total number

[1] The essential characteristic of a family farm is not to be found in the size of its sales, acreage, or capital investment, but in the degree to which productive effort and its reward are vested in the family. The family farm is an agricultural business in which the operator is a risk-taking manager who, with his family, does more than half of the farm work. Statistical information on hired labor is ample and adequate, but very little is available on operator and family labor. However, it is estimated that the family labor supply on the average farm is about 1.5 man-years. As a convenient working definition, farms using less than 1.5 man-years of hired labor are classified in this paper as family farms, and those using more than 1.5 man-years of hired labor are classified as larger-than-family farms.

[2] For more information on problems treated in this article, see also Radoje Nikolitch, "Family and Larger-Than-Family Farms--Their Relative Position in American Agriculture," U.S. Dept. Agr., Agr. Econ. Rpt. 4, Nov. 1962; "Family Labor and Technological Advance in Farming," Jour. Farm Econ. 44: 1061-1068, Nov. 1962; "Our 100,000 Biggest Farms--Their Relative Position in American Agriculture," U.S. Dept. Agr., Agr. Econ. Rpt. 49, Feb 1964; "The Expanding and the Contracting Sectors of American Agriculture," U.S. Dept. Agr., Agr. Econ. Rpt. 74, May 1965.

[3] Adequate family farms are businesses with sufficient resources and productivity to yield enough farm income to meet expenses for (a) family living; (b) farm expenses, including depreciation, maintenance of the livestock herd, equipment, land and buildings, and interest on borrowed capital; (c) enough capital growth for new farm investments required to keep in step with technological advance and rising levels of living.

[4] Value of sales throughout this paper is in terms of 1959 prices received by farmers.

of farms with $2,500 or more of sales showed practically no change in the 1950's. There were 2,180,000 farms with $2,500 or more of sales in 1949, and 2,175,000 such farms in 1959. A fifth of the net decrease in the number of all farms for 1949-59 was accounted for by the decrease in the number of cropper units with less than $5,000 of sales. The number of noncommercial farms did not change significantly (fig. 1).

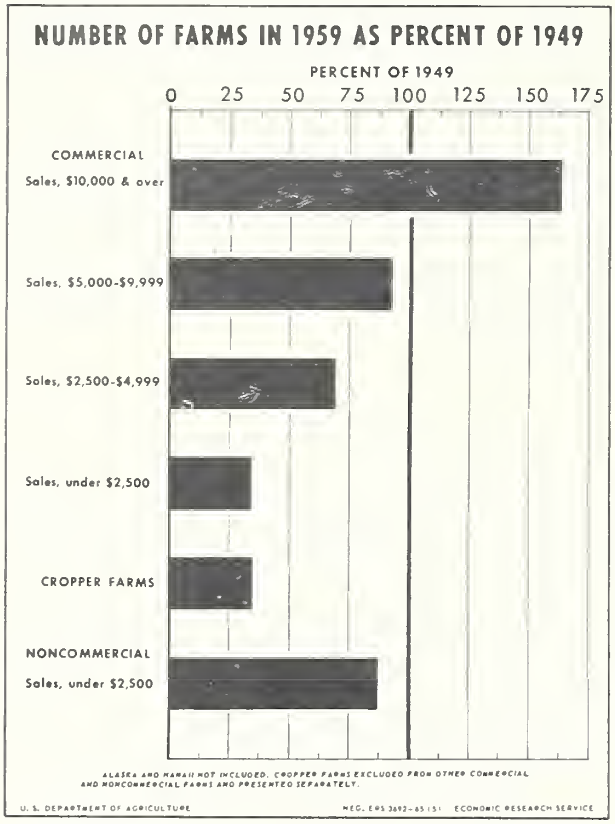

Figure 1

In 1959, the annual gross income of commercial units with gross sales of less than $2,500 was about $1,400 per farm. As a group they accounted for only 1.8 percent of the total farm marketings. These units have so few resources and such low productivity that they have little chance of being reorganized into efficient businesses. Under present technology such small units cannot survive as economic businesses, although some may provide a supplementary livelihood for their operators' families who may be employed off the farm.

The present and the future of American farming lie chiefly with the remaining farms above that size, and especially with units producing more than $10,000 of marketings.

The Expanding Number of Adequate Farms

The farm economy in the postwar period has been divided into an expanding sector of relatively large farms and a contracting sector of relatively small farms. During the 1940's, the dividing line between these two sectors fell somewhere in the group of farms with $5,000 to $9,999 of sales. During the 1950's in most of the country it rose to the group of farms with more than $10,000 of sales.[5] The boundary between the two sectors may be expected to continue to rise in line with further technological advance, higher standards of living, and higher levels of national economic progress. For the period analyzed in this paper, available data indicate that about $10,000 worth of marketings represents the dividing line between the two sectors. From 1939 to 1959, the number of farms with less than $10,000 of sales decreased 41 percent and the value of their marketings declined 19 percent. For the same period the number of farms above this level of sales increased two and a half times, and the value of their marketings more than tripled.

Four developments in the expanding sector deserve particular attention.

1. Farm production is rapidly concentrating in this sector. It accounted for 71 percent of all farm marketings in 1959, compared with only 39 percent in 1939, and 50 percent in 1949. In 1964, there were about 1 million farms in the expanding sector representing 28 percent of all farms, and accounting for 81 percent of total farm marketings. However, the concentration of production in this sector is not occurring in a smaller number of farms. The expanding sector had 77 percent more marketings by 1959 than in 1949, but it also had 67 percent more farms (table 1). Of greater significance is the change in the group of farms with $40,000 or

[5] Except for the Appalachian, Southeast, and Delta States regions, where the dividing line was still represented by about $5,000 of sales.

Table 1.--Value of sales and acreage for the expanding and the contracting sectors of agriculture, 1959 as a percentage of 1949, total United States and per farm[1]

Item	Number of farms	Sales		Acreage	
		Total	Per farm	Total	Per farm
Expanding sector:	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
$40,000 or more of sales..............	220.8	189.3	85.7	--	--
$10,000 to $39,999 of sales...........	160.8	168.9	101.3	--	--
Total...........	166.6	177.3	106.4	137.6	82.6
Contracting sector: Less than $10,000 of sales..............	68.8	72.7	96.3	72.0	104.6

[1] Alaska and Hawaii not included. Adjusted to the more exclusive definition of farms in the 1959 Census of Agriculture.

more marketings. During the 1950's this group of farms expanded its output 89 percent while expanding its numbers 121 percent, so that output per farm decreased 14 percent.

2. In 1959, the expanding sector of farms included 56 percent of the land in farms compared to 40 percent in 1949. However, the increasing proportion of land in this expanding sector does not imply a concentration of land into a few large holdings. For, while this sector included 38 percent more land in 1959 than in 1949, it also included 67 percent more farms. Thus, the acreage per farm in the expanding sector decreased 17 percent (table 1).

3. The expanding sector of agriculture included many more tractors, livestock, acres, and other physical resources in 1959 than in 1949. But the larger quantity of resources is due more to the increasing number of farms in this sector, than to an increase in land and capital goods per farm (fig. 2).

4. The average age of farm operators is about the same as that of self-employed persons in other industries. More importantly, in this expanding sector, the number of operators is increasing rapidly in all age groups--including the youngest group of operators under 35 years of age. This, as shown in table 2, is not true in the contracting sector of farms with less than $10,000 of sales.[6]

These developments show that the national production of food and fiber is not falling into the hands of an aging group of farm operators.

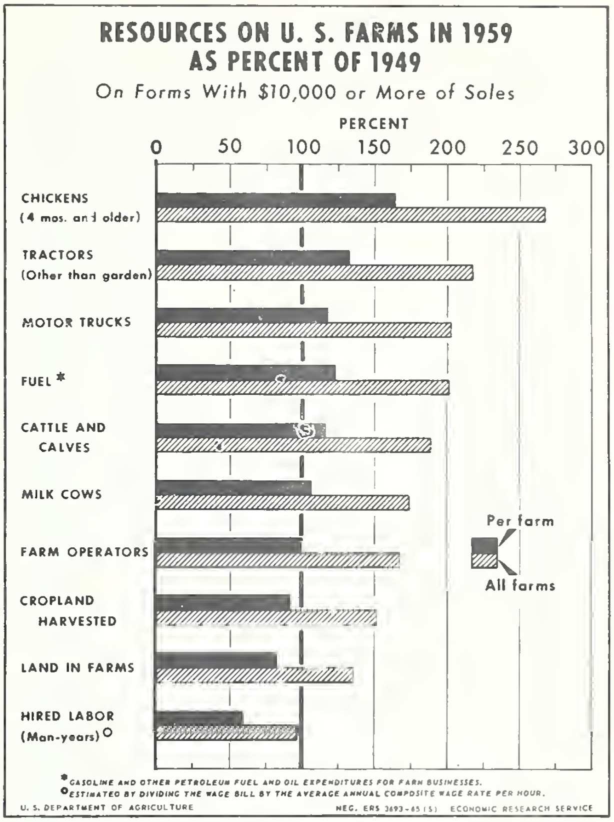

Figure 2

Table 2.--Percentage changes in number of farm operators, by age groups and size of farms in value of sales, United States, 1949 to 1959[1]

Age of farm operator and value of sales	Increase	Decrease
Under 35 years:	*Percent*	*Percent*
$10,000 or more........	44	--
Less than $10,000......	--	62
35 to 64 years:		
$10,000 or more........	81	--
Less than $10,000......	--	34
65 years or more:		
$10,000 or more........	64	--
Less than $10,000......	--	21

[1] Alaska and Hawaii not included.

Source: Census of Agriculture, Vol. 11, Chapter XI.

They also show that the concentration of farm production, farmland, and other farm resources is not occurring in a decreasing number of large businesses, but, on the contrary, in an expanding number of adequate farms.

[6] For additional information on age of farm operators and other farm workers, see Radoje Nikolitch, "The Expanding and the Contracting Sectors of American Agriculture," U.S. Dept. Agr., Agr. Econ. Rpt. 74, May 1965, pp. 19-22.

Dominance of Family Farms

If changes in the structure of farm economy indicated the decline of family businesses in farming, at least four circumstances would be appearing. First, family farms would be an increasingly smaller proportion of all farms, and would be accounting for an increasingly smaller proportion of all farm marketings. Second, family farms would be losing their dominance most rapidly in the expanding sector of adequate farms with $10,000 or more of sales. Third, hired labor would be accounting for an increasing proportion of all work done on farms. Finally, we would expect to see a considerable change in the Nation's traditional land tenure patterns. In all these respects, however, the actual findings do not indicate any decrease in the overwhelming dominance of family farms in American agriculture.

First, both the number and the production of family farms did not change significantly as proportions of all farms. In 1949, family farms accounted for about 95 percent of all farms, and for 66 percent of total farm marketings; in 1959, for about 96 percent of all farms and 69 percent of total farm marketings. Estimates for 1964 indicate about 96 percent and 73 percent respectively.

Second and more important, adequate family farms with $10,000 or more of sales are the most rapidly expanding part of the farm economy. An analysis for 1949 to 1964 shows that only family farms with $10,000 or more sales were increasing in number (table 3). There was a decline in the number of farms in all other classes, including the larger-than-family farms with $10,000 or more of sales. Farm production was increasing 14 times as fast for family farms with $10,000 or more of sales as for larger-than-family farms with the same sales (table 4).

In 1949, family farms represented 68 percent of all farms in the expanding sector, and accounted for 42 percent of marketings by the sector. In 1959, almost 82 percent of all farms in the expanding sector were family operated businesses, and they had 57 percent of the marketings. It is estimated that in 1964 family farms accounted for 88 percent of all farms with $10,000 or more of sales and for 67 percent of their marketings (table 5).

The rapid increase in the proportion of family farms and of their production is even more pronounced among the larger farms with $40,000 or more of sales. A preliminary estimate indicates that less than one-fifth of the farms in this group were family farms in 1949, compared with almost two-fifths in 1959.

The family farms with $10,000 or more of sales are classified as adequate family farms in this paper only on the basis of their economic fitness to survive the keen competition in our agriculture. No implication is intended as to the adequacy of family income on these farms. Gross sales are only one of many data needed for a study of family farm income. In that respect Harold E. Barnhill's study of 16 major types

Table 3.--Number and value of sales of family and larger-than-family farms in the expanding and contracting sectors of agriculture, United States, 1949, 1959, and estimate for 1964[1]

Class of farms and value of sales	Number of farms			Value of sales		
	1949[2]	1959	1964	1949[2]	1959	1964
	Thous. farms	*Thous. farms*	*Thous. farms*	*Mil. dol.*	*Mil. dol.*	*Mil. dol.*
Family farms:[3]						
$10,000 or more of sales	346	684	891	6,164	13,848	20,163
Less than $10,000 of sales	4,301	3,120	2,451	11,513	9,221	7,045
Larger-than-family farms:[4]						
$10,000 or more of sales	166	154	119	8,465	10,331	9,834
Less than $10,000 of sales	100	20	11	616	112	62
All farms:						
$10,000 or more of sales	512	838	1,010	14,629	24,179	29,997
Less than $10,000 of sales	4,401	3,140	2,462	12,129	9,333	7,107

[1] Alaska and Hawaii not included. Adjusted for census undercounting. Croppers not counted as independent units.
[2] Adjusted to changes in farm definition in 1959 Census of Agriculture.
[3] Farms on which families are risk-taking managers using less than 1.5 man-years of hired labor.
[4] Farms using 1.5 or more man-years of hired labor.

Table 4.--Percentage changes in number and value of sales of family and larger-than-family farms from 1949 to 1964, United States[1]

Class of farms and value of sales	Number	Value of sales
	Percent	*Percent*
Family farms:		
$10,000 or more of sales	+157.5	+277.1
Less than $10,000 of sales................	-43.0	-38.8
Larger-than-family farms:		
$10,000 or more of sales	-28.3	+16.2
Less than $10,000 of sales................	-89.0	-89.9

[1] Alaska and Hawaii not included.

Table 5.--Number and value of sales of family and larger-than-family farms as a percentage of total in specified sales groups, United States, 1949, 1959, and estimate for 1964[1]

Class of farms and value of sales	Number of farms			Value of sales		
	1949	1959	1964	1949	1959	1964
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Family farms:						
$10,000 or more of sales..	67.6	81.6	88.2	42.1	57.3	67.2
Less than $10,000 of sales	97.7	99.4	99.6	94.9	98.8	99.1
Larger-than-family farms:						
$10,000 or more of sales..	32.4	18.4	11.8	57.9	42.7	32.8
Less than $10,000 of sales	2.3	·0.6	0.4	5.1	1.2	0.9

[1] Alaska and Hawaii not included.

of farming in 29 different farming areas is of particular interest.[7] He shows that "the amount of gross sales required on the 29 farms budgeted for operator labor and management earnings of $2,500 a year ranged from $6,750 to $26,450--on 23 of them sales exceeded $10,000. For earnings of $3,500, the range was $9,340 to $36,960. And, for earnings of $4,500 and $5,500, the range was from $11,700 to $49,230 and $14,990 to $62,100 respectively. On 20 of the farms budgeted for $5,550 operator earnings, gross sales exceeded $20,000."

Third, a judicious estimate indicates that from 1949 to 1963, the proportion of total farm work done by hired labor, on the average, declined somewhat more rapidly than the proportion done by operators and unpaid members of the family.[8]

Fourth, if family farms were losing ground to a factory farming system or to large corporate farming businesses, we would expect to find a considerable increase in the acreage of farmland operated under paid management. However, the structural changes in agriculture do not appear to be altering traditional land tenure patterns in the United States.[9] During the 1940's the proportion of land operated by owners and paid managers increased considerably owing to the favorable relationship between prices farmers received for their products and prices they paid for farm supplies. But, during the 1950's, the proportion of land operated by owners, renters, and paid managers remained stable. Throughout this period, about 55 percent of all land in farms was operated by owners, 35 percent by renters, and less than 10 percent by paid managers (table 6).

Table 6.--Land in farms operated by owners, renters, and paid managers, United States, 1924-59[1]

Year	Acreage operated by--				Percentage of total[2]			
	All operators	Owners	Renters	Paid managers	All operators	Owners	Renters	Paid managers
	Mil. acres	*Mil. acres*	*Mil. acres*	*Mil. acres*	*Percent*	*Percent*	*Percent*	*Percent*
1924[3]......	924	520	361	43	100.0	56.3	39.1	4.6
1929.......	990	494	432	64	100.0	49.9	43.7	6.4
1939.......	1,065	527	469	69	100.0	49.5	44.0	6.5
1944[3]......	1,142	605	431	106	100.0	53.0	37.7	9.3
1949.......	1,161	644	410	107	100.0	55.5	35.3	9.2
1954[3]......	1,160	656	404	100	100.0	56.6	34.8	8.6
1959.......	1,123	616	397	110	100.0	54.9	35.3	9.8

[1] For 1949, 1954, and 1959 no direct information is available in the Census of Agriculture on these three operatorship tenures. The distribution of farmland among the three tenures was estimated for these years on the basis of census data by assuming that part-owners did not subrent their rented land.
[2] Computed before rounding numbers.
[3] Alaska and Hawaii not included.

Source: Derived from Census of Agriculture, 1959, Vol. 11, Ch. X, table 16, p. 1042.

[7] Harold F. Barnhill, "Resource Requirements on Farms for Specified Operator Incomes," U.S. Dept. Agr., Agr. Econ. Rpt. 5, revised Nov. 1964.

[8] Farm labor is not separated from the control of resources used in production nor from the management of production. It is through the marketings or home consumption of its production that family labor secures a return for its work.

[9] We are speaking here of the tenure under which farmland is operated, disregarding the composition of operating units. Thus, for example, in a part-owner farm, a part of the land is owned by the operator and another part is rented.

Conclusion

The immense economic and technological progress in recent years has not changed two basic structural characteristics of American agriculture. Contrary to what has happened in other industries, farms continue to be relatively small businesses. And second, the traditional dominance of family farms continues to be as notable as ever.

Adequate family farms were, and still are, the mainstay of the American farm economy. Moreover, the evidence indicates that this dominance of family farms is increasing. It shows also that farm production is rapidly concentrating on adequate family farms.

In 1949 there were 17 family farms for each larger-than-family farm. In 1964, that ratio increased to 26 family farms for each larger-than-family farm. For every $100 of sales by larger-than-family farms in 1949, family farms marketed $195. In 1964, for every $100 of sales by larger-than-family farms, family farms sold $275 worth of farm products.

In 1949, the adequate family farms (those with $10,000 or more of sales) accounted for 7 percent of all farms and for 23 percent of total farm marketings. In 1964, they accounted for 26 percent of all farms and for 54 percent of all farm marketings.

This rapid expansion of adequate family farms is evidence that the traditional independence of American farmers is not endangered by any concentration of farm production in a few "farming factories" or in large corporate businesses in agriculture.

Family farms are getting fewer and bigger, but there is no indication of their replacement by larger-than-family farms.